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## Patent Abstracts of Japan

AD

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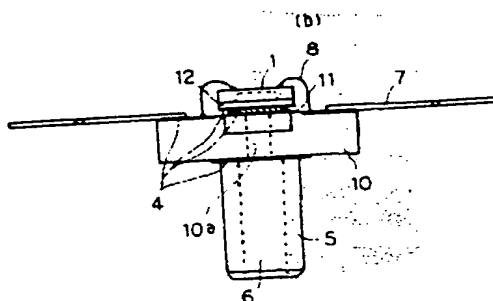
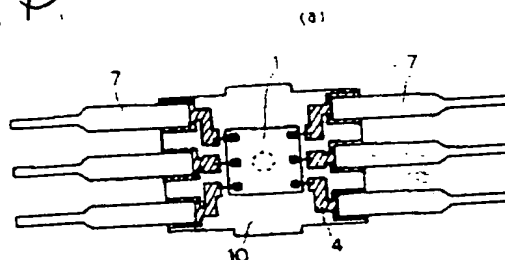
APPLICATION DATE : 29-05-84  
APPLICATION NUMBER : 59110562

APPLICANT : OMRON TATEISI ELECTRONICS CO;

INVENTOR : IMAZU KEINOSUKE;

INT.CL. : H01L 29/84 G01L 9/04

TITLE : SEMICONDUCTOR PRESSURE  
SENSOR



ABSTRACT : PURPOSE: To prevent the easy breaking of a semiconductor pressure sensor even when stress is applied to a lead frame and a pressure introducing pipe by forming a base by alumina ceramics and connecting a semiconductor pressure sensor chip to the upper surface of the base through a spacer, a thermal expansion coefficient thereof approximates to that of the semiconductor pressure sensor chip.

CONSTITUTION: Alumina ceramics are used as a base 10. A through-hole 10a is formed at the center of the base 10, a metallizing layer 4 is shaped onto a lower surface through evaporation, etc., and a pressure introducing pipe 5 is fitted. Metallizing layers 4 as metallic patterns are formed onto an upper surface, and lead frames 7 are fitted. A metallizing layer 4 is also shaped at the central section of the upper surface and a molybdenum washer 11 is connected, and a metallizing layer 4 is shaped onto the upper surface of the washer 11. A spacer 12 consisting of zirconium ceramics is mounted to the upper section of the washer 11 through the metallizing layer 4, and a semiconductor pressure sensor chip 1 is joined with the upper section of the spacer 12. The pressure sensor chip 1 is formed in bridge structure and has six electrodes, and is connected to the metallizing layers 4 on the upper surface of the base 10 as the electrode patterns by gold wires 8.

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